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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,070	01/14/2004	Douglas Lee	ADAPP263	5089

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EXAMINER	
FERRIS III, FRED O	
ART UNIT	**PAPER NUMBER**
2128	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/758,070	LEE ET AL.	
	Examiner	Art Unit	
	Fred Ferris	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 January 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 have been presented for reconsideration based on applicant's arguments filed 31 January 2007. Claims 1-20 are remain pending in this application and stand rejected by the examiner.

Response to Arguments

2. Applicant's arguments filed 31 January 2007 have been fully considered.

Regarding applicants' response to objection the drawings: The examiner withdraws the objection to the drawings in view of applicants' corrected drawings submitted 31 January 2007.

Regarding applicants' response to 35 USC 102/103 rejections: The main thrust of applicants' arguments center around a single issue. Namely:

- The examiner has equated Prices' "circuit test connection specification" and "verification specification" to applicants' "product specification".

Applicants' assumption regarding this issue is incorrect. In this instance applicants have simply failed to embrace the teachings of prior art Price and Killian. What Price teaches is that the circuit test connection specification and verification specification are derived (e.g. extracted) from a circuit description. The circuit description, as disclosed by Price, contains information on the circuit's design (i.e. a specification) from which test data is extracted (See: CL2-L1-5, CL5-L46). Turning to the instant invention, as best understood from the wording of applicants' claims, and the specification, the parameters that are extracted from the specification (product

specification) deal solely with testing parameters that are extracted and stored in a testing data file and delivered to a test bench (Specification page 10, [40]). Here, all of the extracted data, as taught by applicants' specification, deals with testing data (Specification page 11, [45]-[57]), and test register loading. There appears to be no specific teaching of the extraction of specification parameters other than test data. In a nutshell, it would appear that applicants claimed "product specification", from a functional standpoint, is simply a test specification and therefore arguably equivalent to the circuit description disclosed by Price. This ambiguity also leads to multiple interpretations of the claimed subject matter necessitating an alternate rejection in view of Killian as cited by the examiner. Applicants' argument that the passages on page 1, paragraph [3] (Background of the Invention) offer a definition of the claimed "product specification" are not persuasive since the passages appear to simply offer what MAY generally be included in any ASIC specification, but offer no clear definition of a "product specification" consistent with applicants claimed subject matter. In any event, prior art Killian also teaches a functionally equivalent "configuration specification" (CL18-L31-44, Figs. 3-6) which clearly meets applicants' argued definition of a "product specification" (e.g. contains circuit design parameters including; clock rate, area, cost, and power consumption, etc.). Applicants' claimed "product specification" would therefore clearly be obvious in view of analogous art Killian.

In summary, the examiner submits that applicants arguments relating to the claimed "product specification" appear to be more specific than either the specification, or the claims require, since the claimed subject matter is drawn entirely to extracting

testing data, as is the cited prior art Price and Killian. The examiner therefore maintains the 102/103 rejection of claims 1-20.

Claim Rejections - 35 USC § 103/102

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent 7,103,860 issued to Price et al.

Regarding independent claim 1: Price teaches method for testing a development device by extracting device parameters from a product specification (CL7-L29-37, CL8-L44-53), storing the parameters in a testing data file (CL7-L41), inputting the test file into a test bench (i.e. device under test (DUT)) coupled to device, and testing the device (CL11-L25-43, Figs. 4-7).

In the alternative, claims are rejected under 35 U.S.C. 103(a) as obvious in view of U.S. Patent 6,760,888 issued to Killian et al.

Killian specifically teaches a test bench (external to the DUT) coupled to the device (CL24-L33-54, Figs. 2, 8) and hence would have knowingly been incorporated by a skilled artisan motivated by the need to automatically configure processor test devices based on specification inputs for an external device (Killian CL6-L19-33).

Per claims 2-7: Price further discloses receiving product specification and changing formats (CL7-L51-58), a text format (CL7-42), and operational test parameters (CL13-L1-CL14-L63) relating development of device by registers including parameters (e.g., size, location, etc.).

Per claims 8-11: Killian discloses header and footer table/file storing parameters (CL27-L33-47), name and location (by necessity), while rearranging parameters, simulated device (CL7-L51-58) are disclosed by Price.

4. Claims 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,103,860 issued to Price et al in view of U.S. Patent 6,760,888 issued to Killian et al.

Regarding independent claims 12 and 20: As noted above, Price renders obvious the elements relating to testing a development device by extracting device parameters from a product specification (CL7-L29-37, CL8-L44-53), storing the parameters in a testing data file (CL7-L41), inputting the test file into a test bench (i.e. device under test (DUT)) coupled to device, and testing the device (CL11-L25-43, Figs. 4-7) inclusive of the required system logic (Figs. 1, 3, 4).

Price does not explicitly set forth that system includes an external test bench.

However, analogous art Killian specifically teaches a test bench (external to the DUT) coupled to the device (CL24-L33-54, Figs. 2, 8) also including logic for inputting test files and testing the device. (Fig. 2, CL24-L33-54)

It would have therefore been obvious to one of ordinary skill in the art at the time

of the invention to modify the teachings of Price with the teachings of Killian to realize the claimed elements of the present invention. Killian provides sufficient motivation for combination of references in setting forth the need to automatically configure processor test devices based on specification inputs for an external device (Killian CL6-L19-33).

Per claim 13: Killian teaches test bench system access via a computer network (CL10-L64).

Per claims 14-18: Price renders obvious the elements relating to logic for receiving product specification (CL7-L51-58), operational test parameters (CL13-L1-CL14-L63) relating development of device by registers including parameters and test. Killian also teaches logic for inputting test files and testing the device (Fig. 2, 8, CL24-L33-54).

Per claim 19: Killian discloses a simulated development device (CL7-L14-26, Fig. 8).

Conclusion

5. ***THIS ACTION IS MADE FINAL.*** *Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).*

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, careful consideration should be given prior to applicant's response to this Office Action.

U.S. Patent 6,862,717 issued to Nadeau-Dostie et al teaches testing of a simulated development device.

"Automating Functional Coverage Analysis Based on and Executable Specification", Regimbal et al, Proceedings 3rd International Workshop on SoC, 2003 IEEE, teaches testing from extracted specification parameters.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778 and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached at 571-272-2279. The Official Fax Number is: (571) 273 8300.

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February 20, 2007

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